

AVIATION

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The Pennsylvania State Capitol, at Harrisburg, looking toward the Susquehanna River

Photo S. W. Kuhnert

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SPECIAL FEATURES

NUMBER
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AIRLINE COSTS

RESULTS OF THE GERMAN CROSS COUNTRY RACE

THE SPECIAL AIRCRAFT INDUSTRY COMMITTEE

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Before the J-4, consisting of a ground diagram and technical information will be forwarded on request.



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Use and Cost

THERE are so many items entering into the cost of transporting goods by air that there is a tendency to become confused and to forget that the fundamental problem of economics apply to aviation as to other forms of transportation. It is obvious that if a railroad could run only two trains a day over its tracks the cost of maintaining the road bed and the necessary office overhead would be such as to make the cost of the line considerably high. In the same way it is evident only one or two trains can run over an airway of five or six, the cost of operating the equipment would be greatly increased. Although it is usually obvious, many people have not realized that the cost of operating an airplane depends on exactly the same factors.

The general public takes the Air Mail figures of cost to be long somewhere near the cost of operating an airplane. Actually the Air Mail is maintaining a lighted airway and a series of landing fields from New York to Chicago and it is only operating two planes a day. It is just as absurd to consider the present cost of operating the mail planes from New York to Chicago as a commercial cost as it would be to run two or three over a railroad and to charge to the operation of these two trains the full cost of the road bed and overhead. Nevertheless there are still people who think that they are finding out something about the cost of airplane operation when they are looking at figures of planes which are only operated half an hour a day. As a matter of fact airplanes are and should be used over five hours a day if the maintenance is economical. It is obvious that that before the cost of operating an air route can be obtained, that the volume of traffic must be expected to allow of a good roadway over a given route and that the plane dimensions must be sized with a reasonable margin.

If it were not for the short distances covered by most of these airlines, the Europeans would, as theory at least, be in a better position to obtain the true cost of operating airplanes than our own Air Mail. On the European airways, especially the London-Paris route there is, due to the government subsidy, a large volume of traffic. A dozen or more airplanes a day take off and land every day at the Croydon and Le Bourget airports. This is not nearly the volume of traffic which these terminals could handle, but it is more than the two planes a day which we use Air Mail facilities. Also the Europeans have not thought it necessary to develop emergency landing fields. They have little right flying equipment. Therefore they have smaller investments in their airways and so do not find it necessary to fly as many planes in order to meet their present expenses.

Europe seems to have gone further than the United States

in developing multi-engine planes and directional wireless. If this material could be subjected to an emergency field and night lights at intervals of a few miles it would greatly decrease the cost of the ground organization and the necessity of running a large number of planes over the route in order to bring down the cost. The Europeans, and especially the English believe in the inherent wisdom of their equipment thus decreasing their capital investment, decreasing depreciation due to aging and enabling them to substitute modern equipment as rapidly as it is developed.

No one at the present time has accurate figures on the operation of airplanes and it will probably be years before definite cost figures are ascertained.

The Future of Night Flying

WITH the successful operation of the night Air Mail, and now its further expansion to the New York-Chicago route, it is interesting to look ahead a little, toward the probable future development. Night flight operation is a requirement for any large scale commercial transportation, next to absolutely indispensable. That air traffic will in the future however, come to a point of complete confidence in these who are promoting the present development.

Assuming these acceptable premises, the first will very likely come when traffic over the larger routes will have grown to such proportions that airplanes may be much more economical than airplanes. Now it happens to be one of the problems of aviation, that they require no lighted airway or any night of way whatever along the route. In fact, a large commercial airway would probably need no fixed use of a lighted airway, already in existence.

The most recent system of airway operation on a long route is not to navigate with any reference to a prearranged route over the ground, but rather to choose each route as and yield the most help, and the least hindrance, from winds and weather. In other words, giving recognition from the known point of view is simply a matter of leaving one terminal and arriving at another, with no intermediate stops and with no fixed route.

It is possible, however, and may be perfectly feasible to take on and discharge loads en route. For this purpose the most practical method so far demonstrated, seems to be the temporary landing and refueling of airplanes. In any case, airplanes will be known then as an means to believe that the present lighted airways will ever become obsolete, although their cost must eventually be repaid, with some certainty, to the particular stream of traffic which profit from their use. For the most terminals, facilities suitable for both type of aircraft will be necessary.



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Publisher's News Letter

The New York Times makes a very proper criticism of the delay at terminals of air transport in an editorial commenting on the first roundup night air mail letter sent to Chicago and return by AVIATION. Under the heading "Much Time Lost at Terminals" it writes:

"There is justification for the claim of L. D. Gardner, the editor of AVIATION that this country now has the fastest mail service in the world, and that he proved it by sending a test letter from New York to Chicago and back again in just forty-one hours at elapsed time between mailing the letter here and its delivery here again."

"That is a fine piece of work, of course, but not without the fact that the time of actual flight was only fifteen hours. It took twenty-one hours to get that letter onto the few miles between the flying fields and the points of mailing and delivery at the two ends. In other words, in the air mail service, as in almost everything else we do in the problem of 'personal distribution' still is confused both as to time and expense."

"That failure adds enormously to the 'spread' between the prices received by producers and those paid by consumers, notably as the matter of all kinds, but almost all, of our mail service, as in almost everything else we do in the problem of 'personal distribution' still is confused both as to time and expense."

In a letter from Major Frank M. Kennedy he brings to our attention that all but one of the passengers of Army flying are also and with out exception are all on active duty in the Air Service. He writes: "It is an interesting thing to note that we have had more of you than of the air officers who formed the first Army Aviation School at College Park, Md., in July, 1911, (Chandler, Kirtland, Beck, Arnold, Millard and Kennedy) that all of them are still alive with the exception of Beck who was murdered, and with the exception of Chandler who is relieved, all of them are on active duty in the Air Service today." It is easy

to overlook the men who by their foresight, and willingness to accept flying as a profession, have created a new military weapon. It is pleasant to recall the pleasure everyone in aviation has when the first work of these officers is remembered.

It is significant to read that the Army has finally given up its dream for the Los Angeles and is prepared to let it go. There have always been a feeling in military circles that the idea of getting the Los Angeles from the Zeppelin company organized in the Air Service and that it could have its own army of men with the airfield. That, Acting Secretary of War Davis has stated that the Army was satisfied to leave the task of the army with the Navy. The reason given is that all available funds should be applied to the purchase of airplanes for the Air Service. With the support of the Army as depicted as it was shown to be at the hearings of the Langport Committee, the decision seems to be commendable. Then, too, the Service of Aeronautics has handled its aviation (please note that we are trying to avoid the word "aviation" here—don't you?) with great credit to the Navy.

A few months ago the valuable "Sherry" Schneider was asked to take over the management of the Ford Airport and of flying for the new Ford Airlines. He wrote in AVIATION and added that he was the man of pilots who might with a job with the Ford outfit. A small note to that effect was immediately published. Read what was the result as reported by the friend of ours from there any man we know: "Regarding the number of instructors received due to the loss of the Ford Airlines, let me say that, recently, 500 direct and about 200 indirect instructors have been received due to the notice. Let me take this opportunity to thank you for the assistance."

It is gratifying to hear of such a splendid response in a small article in AVIATION. Sometimes, publishers wonder whether the columns they edit are read by their readers carefully at all times. Such words of appreciation are greatly appreciated particularly at a time when the statistical papers are increasing with every report from the aircraft manufacturers—L. D. G.

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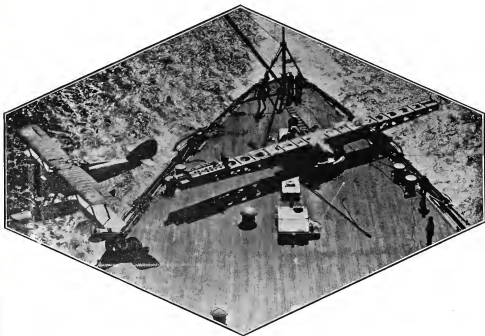
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